Aries Mk 258

user`s guide

AMERICAN
TECHNOLOGIES
NETWORK
CORP.

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APPLICATION

The Aries 258 night vision weapon scope is a complex computerized system for the observation of objects at low light levels (less than 1.0 lux.) Containing an on board computer, these scopes are some of the most advanced night vision weapon scopes in the world

The Aries 258 consists of the objective lens assembly, ocular lens assembly and the body. The body contains the image intensifier tube assembly with the integrated high voltage power source. The body also houses the electronics for the reticle, the computer console for the "Smart Technology" as well as the battery compartment. The 100M infra-red illuminator is located on the opposite side from the battery compartment.

The objective lens protective cover is designed to protect the lens from scratches and abrasions. This cover also protects the image intensifier tube from exposure to daylight or other bright light sources. The protective cover acts as a daylight filter, note the pinhole in the center of the lens cap.

NOTE: *Please refrain from testing in the daylight for more than ten (10) minutes at a time.*

MASTER POWER SWITCH

The master on/off switch is to be found on the back of the unit. Once the scope's master power switch is turned to the "ON" position, you will then be able to adjust the scope from the control box.

CONTROL PANEL

The Cluster of three buttons on the side of the Aries 258 are your controls for the unit. The "SL" button acts as a three way **selection** toggle. By pressing it once, you will see one of three colored diodes, located on the rear side of the control box, light up. Make sure to keep both eyes open, and we suggest that you use your right eye for aiming through the scope. This will give you a HUD (Heads Up Display) of the scope's functions while using the scope. The + and - adjustment buttons increase and decrease the level of a particular function.

The three colored **led diodes** represent the mode of function of the scope. "**B**" for **B**rightness of the light intensifier tube, "**R**" for **R**eticle brightness, and "**I**" for **I**R Illuminator brightness.

LIGHT INTENSIFIER TUBE BRIGHTNESS ADJUSTMENT

The **green diode** "**B**" represents light intensifier tube power ratio. Once this is lit you can adjust the brightness of the light intensifier with the "+" and "–" adjustment buttons.

NOTE: *The Aries 258 is a GEN 1 Night Vision device, adjustments Involving the light intensifier tube will be subtle due to the nature of the design. Adjusting the tube's power down will take longer to take effect than adjusting it up. You may notice a persistent green glow after the unit has been turned "OFF"(don't keep pressing the key) this too is due to the nature of the design of a GEN 1 light intensifier tube's power supply.*

RETICLE BRIGHTNESS ADJUSTMENT

By pressing the "SL" button again you will see a **yellow diode** "**R**" light up next to the green one. The **yellow diode** represents the reticle's brightness. Adjustments should be easily seen if you look through the Aries 258 while you work the "+" and "–" adjustment buttons.

To adust the brightness of the reticle, or to turn It off all together, use the buttons located on the control box on the side of the unit press and hold one of the "+" or "–" adjustment buttons while the yellow diode is lit and looking through the scope to see the change in brightness. When desired brightness is reached, release the button.

INFRA-RED ILLUMINATION

By pressing the “SL” button a third time you will then see a **red diode** “**I**” light up. The **red diode** represents the 100M infra-red illuminator’s brightness adjustment mode. Adjustments should be easily seen if you look through the Aries 258 while you work the “+” and “–” adjustment buttons.

Infra-red illuminators, or IR illuminators, are common to night vision. The IR light greatly enhances the performance of the Aries 258, while remaining almost totally invisible to the naked eye. The IR illuminator on the Aries 258 is the 100M and is located near the windage and elevation adjustments.

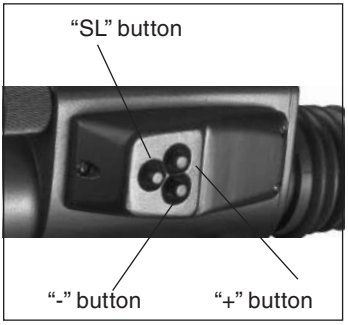
In a dark environment, power up the Aries scope. Now, find a scene and examine it without the IR on, and with the IR on. Note the difference in illumination. It is important to remember that the IR illuminator is simply an infra red light source, and like any light source, It may loose its effectiveness over a great distance.

You may desire a different field of coverage from the IR illuminator, if so the beam is focusable. By turning the lens of the IR illuminator you will change the beam width slightly.

NOTE: *The IR will automatically turn off when the unit’s main power switch is turned to the “off” position.*

SLEEP MODE

One of greatest new features, that your Smart scope has is a “SLEEP” mode. This feature will extend the life of your scope many folds, set the scope to memorize your initial settings and extend your battery life (by settings we mean only the digital settings. These include brightness of the tube, brightness of the reticle, and magnitude of the IR.) The sleep mode works in the following way:



The scope will automatically shut down if it dose not sense any activity for 20 minutes. Activity includes pressing any of the buttons ir simply moving it back and forth away from your face. When activating the sleep mode the scope will first warn you by turning off the reticle for 10 seconds. If your intention is to keep using the scope, simply touch any key and the scope will reactivate.

One of the reason why a “SLEEP” mode is programmed into your scope is to preserve the life of light intensifier tube and batteries in case you forget to turn your unit off. If you notice that the reticle has turned off after 20 minutes, just push “SL” button and the scope will return to its previous settings.

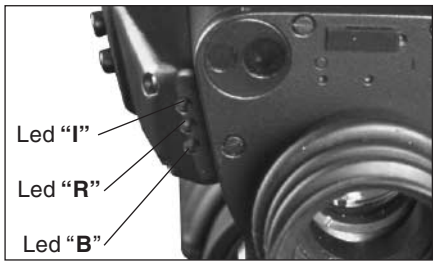
If you would like to put your scope in the “SLEEP” mode before the 20 minute period, just push the “SL” and “–” at the same time. Just push “SL” to return to previous settings, the “Smart” scope will remember them. This will be a very valuable feature if you are waiting for game to come, you could prepare all of the settings, place the unit in “SLEEP” mode and activate it precisely when you need it. To disable the proximity sensor press “SL” and “+” at the same time. In order to turn the proximity sensor back on, press” SL” and “+” at the same time again.

NOTE: *The scope will be capable of running on “SLEEP” mode for more than 10 (ten) days and will be ready to use at any moment. Remember, you don’t have to turn the unit off while you are using it (“Smart” sight will remember all the settings.) Use master “ON/OFF” switch only to store the scope. The proximity sensor will work best in a dark environment. Daylight testing and/or*

other situations with strong lighting may result in a temporary decrease of the proximity sensor's performance.

LOW BATTERY INDICATOR

A Low battery indicator is another feature that is programmed into your "Smart" scope. If the batteries start losing voltage. **Led "B"** will start to pulse. It Is time to change your batteries.



FOCUSING

To focus the Aries 258, first you will need to adjust the diopter. Simply turn the diopter clockwise until it stops. Then, while looking through the diopter at a subject, slowly turn the diopter back counter clockwise until the grain in the image is sharp.

NOTE: *We suggest that you focus the diopter during daylight with the filter on. Next focus the front lens until the image and the grain are both sharp. When you are in low-light conditions and the daylight filter is off, you may focus the front lens to receive a sharp image, the diopter should not be adjusted.*

NOTE: *The front lens should be readjusted as you view objects at different distances.*

CLEANING THE EYEPIECE

You may need to clean the eyepiece and of the unit you have purchased from time to time in order to guarantee top performance. When you receive your Aries 258 you should check for dust on the eyepiece of the unit.

Eyepiece is attached to the body of the unit by two small set screws. By loosening the set screws you can easily slide out the eyepiece section of the unit. If there is resistance when you slide out the eyepiece stop and make positive that the set screws are sufficiently loosened.

NOTE: *You do not have to remove the set screws completely, they are very small and easy to misplace.*

Now, with a little more effort in the same counter-clockwise direction, you can unscrew the eyepiece section of the scope.

Once the eyepiece section has been removed from your Aries scope, you may now clean the dust off the glass surfaces as well as the phosphor screen of the light intensifier tube. When reinserting the eyepiece into the scope, make sure it is seated completely with the internal rubber bushings.

CAUTION: *Use only Photographic lens cleaning tissue on these surfaces. Be careful not to scratch or smudge any of these surfaces. When using compressed air to blow dust away, make sure to avoid inverting the can while spraying. This may cause frozen propellent to exit the can, which can result in serious problems of the glass and phosphor screen.*

MOUNTING THE ARIES 258

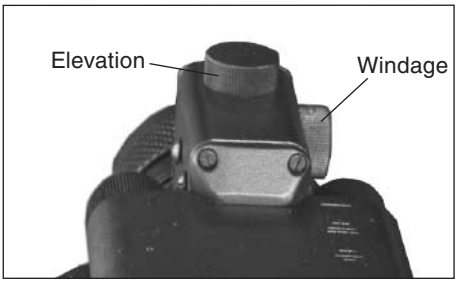
1. Slightly loosen horizontal and vertical fixator screws on the dove tail clamps, allowing the clamps to slide on the rail.
2. Place the scope on dovetail mount, making certain that the mount aligns with the receptor attachment screw groove. Adjust as necessary.
3. Tighten horizontal fixator screws.
4. Remove the Aries scope entire mounting mechanism. Tighten vertical fixator screws and horizontal fixator screws.
5. Remount Aries 258 and tighten receptor attachment screws.

NOTE: *Receptor attachment screws may need to be tightened after continues shooting.*

WINDAGE AND ELEVATION

The vertical and horizontal adjustments for the Aries 258 can be achieved by turning the elevation and windage adjustment mechanisms. Each click equal .5 inch at 100 yards.

NOTE: *When reaching the maximum of the rotation, do not use force.*



USING THE CAMERA ADAPTER (OPTIONAL)

To use your Aries Mk-258 with a 35mm camera or camcorder you will need the following:

1) If you plan to use a camcorder then your camcorder must have a MACRO feature. Most modern camcorders today have a MACRO feature built-in.
2) If you plan to use a 35mm camera you will need a MACRO lens. If you don't have one we advise that you contact your local camera store.
3) You may or may not need a STEP-UP or STEP-DOWN ring in order to adapt the camera adapter to your lens.

NOTE: *The camera adapter comes with 37-mm and 52-mm threads. If you need other sizes your local camera store should be able to help.*

- Remove the rubber eye-cup from the Aries Mk-258
- Screw the camera adapter onto the front of the lens on your Video camera's lens or your 35-mm camera's lens.
- Loosen the three set screws on the camera adapter.
- Place the camera adapter over the Aries Mk-258's eyepiece.
- Tighten the three set screws to fit snugly to the Aries Mk-258 eyepiece
- You may need to focus the 35-mm camera or video camera in combination with the Aries Mk-258 in order to get the sharpest image possible.
- We suggest that you find an open space to work in. Focus the Aries Mk-258 so that the scene is at its sharpest. For the best results you should disable the auto focus (if any) on either the 35mm camera or the video camera and manually focus the 35-mm camera or the video camera. Once the image is in sharp, then simply adjust the Aries Mk-258 front lens to change the focus.
- An important part to remember is that you are not taking a picture of an object that is far away from you, but you are actually taking a picture of a phosphorous screen of the Aries Mk-258 that is only 2-3 inches away.

PREPARATION FOR OPERATION

Before getting started make sure to follow these steps:

- Take the scope out of the case.
- Install the batteries into its housing with the polarity order shown on the main body of the unit.
- Switch on the Aries scope with the master power switch, make sure the protective lens cover is still attached to the tens.
- The unit will turn on automatically when you bring it to your eye. a proximity emitter will send a beam out, that will sense the distance to your forehead.
- We suggest that you use your right eye to aim through the scope. Make sure to have both of your eyes open so you will be able to see the color-coded LEDs with your left eye.
- In order to assure the proper functioning of the proximity sensor make certain, that the protective glass surface of the sensor is always clean.
- When the scope is first powered up, the initial settings are:

  Light intensifier tube Brightness - 100%;

  Reticle brightness - 50%;

  Illuminator brightness - 100%.
- Observe the scene, and adjust the doctor for optimal image clarity,
- You may now enter a dark environment, or simply shut the lights off in order to darken the room.
- Next, remove the lens cap/daylight filter.
- Observe the scene, and adjust the front lent for Ideal focus.
- Adjust the digital features as needed
- The unit will turn-off automatically If you move It away from your face.
- To Increase battery life, the **led** diodes will go off after 10 seconds.
- You will need to focus for different distances.
- Take your time learning about your “smart” scope. It will take practice to properly use this device. As you use this scope you will be able to improve your speed of focusing, as well as sharpness of image.
- Have fun and enjoy.

WARNINGS AND CAUTIONS

- Always remember to turn off the Aries 258 when it is not in use. If you do not plan on using your aries scope for a period of more than 10 days, you should remove the batteries.
- Keep lens cap/daylight filter on when not in use.
- Avoid contact with dust, steam, and gas.
- The Aries 258 are not harmful to the user or the environment
- Do not disassemble except to clean the front lens and the eyepiece: it will void warranty.
- Evaluate the scopes function by looking through It In a lit environment with the day-light filter cap on. Do not surpass ten minutes of testing.
- Never point the Aries 258 at a bright light source. If the scope shuts off automatically after directing it at a bright light source, turn the unit off and wait 1-2 minutes before turning the unit back on.
- Adverse atmospheric conditions such as fog, smog, or haze and a lack of ambient light (moon or starlight) may diminish the effective viewing distance. All technical data for this unit was compiled in a controlled environment.

TROUBLE SHOOTING

Q: Rashes, flickers, or clicking occur while operating

S: If it occurs within the first five minutes of inserting new batteries, it is normal and the device will resume normal operation soon thereafter. If it occurs for more than 10 minutes, contact your dealer or other authorized service representative for service instructions.

Q: Dark spots on screen.

S: These are cosmetic blemishes in the intenslfler tube. They are a by-product of the process of manufacturing night vision tubes. They will not impede your viewing ability.

Q: Image not clear.

S: Adjust focus ring. If problem persists, increase viewing distance

FEATURES

- Digital “Smart” technology
- Total darkness technology
- Automatic brightness control
- Built in 100m IR illuminator
- Internally adjustable lit reticle for windage and elevation
- Mounts to standard U. S. weaver
- Recoil & flash resistant intensifier tube
- Auto “Sleep” mode
- Video/35mm camera adaptable
- Superb multi-coated 6 element lens system
- Manufactured exclusively by ATN
- Two year warranty

SPECIFICATIONS

Magnification	4.0x
Intensifier Tube	First gen.+ hight res.
Lens System	6 elements 90mm; F1.2
Field of View	15°
Resolution	40lp/mm
Maximum tube gain	35.000x
Range of Focus	2’ to ∞
Power Supply	Two 3 V batteries
Battery Life	20 hourd of continuous use
Operating Temperatures	-40°F to +110°F
Dimensions	240mm x 85mm x 100mm
Wight	2.3 lbs

2 YEAR PRODUCT WARRANTY

This product is guaranteed to be free from manufacturing defects in material and workmanship under normal use for a period of 2 (two) years from the date of purchase. In the event a defect that is covered by the foregoing warranty occurs during the applicable period stated above, ATN, at its option, will either repair or replace the product, and such action on the part of ATN shall be the full extent of ATN's liability, and the Customer's sole and exclusive remedy. This warranty does not cover a product (a) used in other than its normal and customary manner; (b) subjected to misuse; (c) subjected to alterations, modifications or repairs by the Customer of by any party other than ATN without prior written consent of ATN; (d) special order or "close-out" merchandise or merchandise sold "as-is" by either ATN or the ATN dealer; or (e) merchandise that has been discontinued by the manufacturer and either parts or replacement units are not available due to reasons beyond the control of ATN. ATN shall not be responsible for any defects or damage that in ATN's opinion is a result from the mishandling, abuse, misuse, improper storage or improper operation, including use in conjunction with equipment which is electrically or mechanically incompatible with or of inferior quality to the product, as well as failure to maintain the environmental conditions specified by the manufacturer. **CUSTOMER IS HEREBY NOTIFIED THAT OPERATION OF THE EQUIPMENT DURING DAYLIGHT HOURS OR UNDER ANY EXCESSIVE LIGHT CONDITIONS MAY PERMANENTLY DAMAGE THE INTERNAL COMPONENTS OF THE UNIT AND SAID DAMAGE WILL NOT BE COVERED UNDER THIS WARRANTY.** This warranty is extended only to the original purchaser. Any breach of this warranty shall be waived unless the customer notifies ATN at the address noted below within the applicable warranty period.

The customer understands and agrees that except for the foregoing warranty, no other warranties written or oral, statutory, expressed or implied, including any implied warranty of merchantability or fitness for a particular purpose, shall apply to the product. All such implied warranties are hereby and expressly disclaimed.

LIMITATION OF LIABILITY

ATN will not be liable for any claims, actions, suits, proceedings, costs, expenses, damages or liabilities arising out of the use of this product. Operation and use of the product are the sole responsibility of the Customer. ATN's sole undertaking is limited to providing the products and services outlined herein in accordance with the terms and conditions of this Agreement. The provision of products sold and services performed by ATN to the Customer shall not be interpreted, construed, or regarded, either expressly or implied, as being for the benefit of or creating any obligation toward any third party of legal entity outside ATN and the Customer; ATN's obligations under this Agreement extend solely to the Customer. **ATN's liability hereunder for damages, regardless of the form or action, shall not exceed the fees or other charges paid to ATN by the customer or customer's dealer. ATN shall not, in any event, be liable for special, indirect, incidental, or consequential damages, including, but not limited to, lost income, lost revenue, or lost profit, whether such damages were foreseeable or not at the time of purchase, and whether or not such damages arise out of a breach of warranty, a breach of agreement, negligence, strict liability or any other theory of liability.**

PRODUCT WARRANTY REGISTRATION

In order to validate the warranty on your product, ATN must receive a completed Product Warranty Registration Card for each unit. Please complete the form below and immediately mail it to our Service Center: ATN Corporation, 20 South Linden Ave., Suite 1B, South San Francisco CA 94080. Products qualifying for warranty repair will be either repaired or replaced within 10 business days of receipt of merchandise unless the customer is notified otherwise.

OBTAINING WARRANTY SERVICE

To obtain warranty service on your unit, take or send the product, postage paid, with a copy of your sales receipt to our service center, ATN Corporation at the address noted above. All merchandise must be fully insured with the correct postage; ATN will not be responsible for improper postage, or, missing or damaged merchandise during shipment.

For customer service and technical support, please contact
American Technologies Network Corp.

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